

CLAIMS

1. A turbine housing comprising a housing body having a first end, a second end and a central region, wherein the housing body comprises a bore running therethrough, and
5 wherein the bore tapers from a first larger cross-section at and/or in the region of the first and second ends to a second, smaller cross-section towards the central region.
2. A turbine housing as claimed in Claim 1 wherein the cross-section of the bore in the central portion is
10 rectangular, cylindrical, oval or square.
3. A turbine housing as claimed in Claims 1 or 2 wherein the shape of the first and second end is frusto-conical, frusto-pyramidal or trumpet shaped.
4. A turbine housing as claimed in Claims 1 or 2 wherein
15 the cross-sectional shape of the central portion of the housing is rectangular or square, and the shape of the first and second end comprises a flared extension of the rectangular or square cross-sectional shape of the central portion of the housing.
- 20 5. A turbine housing as claimed in any preceding claim wherein the first and second end comprise a fluid inlet and a fluid outlet respectively.
6. A turbine housing as claimed in any preceding claim wherein the central portion of the housing comprises means
25 to house a turbine or a rotatable shaft of the turbine.
7. A turbine housing as claimed in Claim 6 wherein the central portion of the housing comprises a bore of uniform cross-section, and suitably the means to house a turbine

or rotatable shaft if located substantially centrally within the central portion.

8. A turbine housing as claimed in any preceding claim wherein the housing comprises means to restrict the fluid flow through the housing body.

9. A turbine housing as claimed in Claim 8 wherein the means to restrict fluid flow through the housing body comprises means to restrict fluid flow through pre-defined areas of the housing body.

10 10. A turbine housing as claimed in Claims 8 or 9 wherein the fluid flow restriction means restricts speed and/or direction of fluid flow through the housing.

11. A turbine housing as claimed in any one of Claims 8 to 10 wherein the means to restrict fluid flow comprises a moveable member, moveable between a first position in which fluid flow is restricted along the housing body and a second position in which fluid flow is not substantially restricted along the housing body.

12. A turbine housing as claimed in any one of Claims 8 to 11 wherein the means to restrict fluid flow comprises a pivotable member, pivotable between the first and second positions.

13. A turbine housing as claimed in Claim 12 wherein the means to restrict fluid flow comprises two moveable members, one each located towards the first and second end of the housing, and arranged such that one of the first and/or second fluid flow restriction means moves to the first position when the other of the second and/or fluid flow restriction means moves to the second position.

14. A turbine housing as claimed in any one of Claims 8 to 13 further comprising a movement limiting means operably co-operable with the means to restrict fluid flow, such that the means to restrict fluid flow is limited between the first and second positions only.
15. A turbine housing as claimed in Claim 14 wherein the movement limiting means comprises an arresting pin which serves to prevent the means to restrict fluid flow from moving out of the range of the first and second positions.
- 10 16. A prime mover comprising a turbine housing as claimed in any one of Claims 1 to 15, on which is mounted a turbine.
- 15 17. A prime mover as claimed in Claim 16 further comprising means to connect the turbine housing to a fixed structure.
18. A prime mover as claimed in Claim 17 wherein the means to connect the turbine housing to a fixed structure comprises means to connect the turbine housing to an ocean, river or sea bed.
- 20 19. A prime mover as claimed in Claim 18 mounted within a floatation unit, arranged in use to enable the prime mover to float in a fluid medium.
- 25 20. A prime mover as claimed in Claim 19 wherein the floatation unit comprises means to enable entrapment of air within the floatation unit and means to enable control of release of air trapped within the floatation unit to enable the prime mover to float or sink in a fluid medium to a desired depth.

21. A prime mover as claimed in Claim 19 or 20 wherein the floatation unit further comprises a waterproof shell, arranged in use to protect a mounted turbine's electrical components from the fluid medium.